

Title (en)

Die-castable corrugated horns providing elliptical beams

Title (de)

Mittels druckgiessverfahren hergestellter gewellter Hornstrahler zur Erzeugung von elliptischen Strahlenbündeln

Title (fr)

Cornets ondulés moulés sous pression formant des lobes elliptiques

Publication

EP 1130679 A2 20010905 (EN)

Application

EP 01107630 A 19951117

Priority

- EP 95942566 A 19951117
- US 34879094 A 19941202

Abstract (en)

A corrugated horn having ridges disposed on the inner surface of the horn, such that the ridges are oriented parallel to the horn axis, is adapted to provide elliptical beams. When the corrugated horn is circular, the elliptical beam is produced by changing the step heights and/or ridge heights around the circumference of the horn, which in turn changes the semi-flare angle, defined as the angle made by the horn axis and a line joining the top surfaces of the ridges. Because corrugated horns constructed according to this invention have ridges oriented parallel to the horn axis, these corrugated horns are readily manufactured using conventional die casting methods or numerical machining techniques. <IMAGE>

IPC 1-7

H01Q 13/02

IPC 8 full level

H01Q 13/02 (2006.01)

CPC (source: EP US)

H01Q 13/0208 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9617402 A1 19960606; AT E225086 T1 20021015; AT E365987 T1 20070715; AU 4375096 A 19960619; DE 69528392 D1 20021031; DE 69528392 T2 20030612; DE 69535525 D1 20070809; DE 69535525 T2 20080417; EP 0878030 A1 19981118; EP 0878030 A4 19990407; EP 0878030 B1 20020925; EP 1130679 A2 20010905; EP 1130679 A3 20020626; EP 1130679 B1 20070627; US 5552797 A 19960903

DOCDB simple family (application)

US 9515857 W 19951117; AT 01107630 T 19951117; AT 95942566 T 19951117; AU 4375096 A 19951117; DE 69528392 T 19951117; DE 69535525 T 19951117; EP 01107630 A 19951117; EP 95942566 A 19951117; US 34879094 A 19941202